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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,358	09/26/2001	Karen Capers	2001P17430 US	6403

7590 10/03/2005

Siemens Corporation
Attn: Elsa Keller, Legal Administrator
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

LAO, SUE X

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,358

Applicant(s)

CAPERS ET AL.

Examiner

Sue Lao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 10-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 14-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-24 are presented for examination.

3. Applicant recites two co-pending applications by the titles on page 1 of the specification. Please update the citation into U. S. application serial numbers.

4. Applicant recites co-pending applications. These are not checked. Applicant is invited to inform the examiner if any of the co-pending applications are particularly relevant to / conflicting with the current application. Applicant is required to maintain a clear line of demarcation between applications. See MPEP § 822.

5. Claim 13 is objected to because of the following informalities: Claim 13, lines 3-4 recites "with in available space", wherein "with in" appears to be "within". Appropriate correction is required.

6. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9 and 14-24, drawn to object communications, classified in class 719, subclass 313;

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- II. Claims 10-13, drawn to space management, classified in class 709, subclass 224.

The inventions are distinct, each from the other because of the following reasons. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, for example, invention I can be used to communicate between distributed objects, without managing / monitoring spaces, and invention II has separate utilities such as configuration and load balancing, without performing inter object communications. See MPEP 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different searches and their recognized divergent subject matter, and the search required for one Group is not required for another, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Stuart P. Kaler on 9/26/2005, a provisional election was made with traverse to prosecute the invention of I, claims 1-9 and 14-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-13 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 1-9, 16-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 1, 16 recite "In a network, said networks" in line 1. There is insufficient antecedent basis for the limitation "said networks" in the claims. For the purpose of art rejection, it is interpreted as "In a network, said network", as best understood and as it appears to be.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5, 7, 16-20, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Page (U S Pat. 5,329,619).

As to claim 16, Page teaches in a network (network 22), said network supporting a plurality of network objects (clients and servers), and wherein said network objects require communications (inter-object communications) between said plurality of network objects (col. 3, lines 31-48; col. 4, lines 23-36); a system for providing communications between network objects comprising:

a means for registering (REGISTER()) said objects desiring communications (col. 37, lines 17-32);

a means for accepting (broker, fig. 12) a communications message from at least one of said objects, said communication addressing one of said plurality of network objects (broker receives REGISTER(), SEND() AND RECEIVE() messages, fig. 12);

a means for determining the mode of message delivery for said message (options in the WAIT field indicating synchronous or asynchronous service request processing, col. 40, lines 10-26);

a means for delivering said message according to the mode of message delivery determined (broker processing logic, table 29, col. 41, lines 1-13, col. 40, lines 10-26).

As to claim 17, Page teaches a plurality of distributed network objects (clients and servers), a means for registering said plurality of distributed network objects in a central service ((REGISTER())). See discussion of claim 16.

As to claim 18, Page teaches a means for handling said communication message in an event-driven programming mode.

As to claims 19, 20, Page teaches a means for selecting a synchronous mode of message delivery and a means for selecting an asynchronous mode of message delivery (options in the WAIT field indicating synchronous or asynchronous service request processing, col. 40, lines 10-26).

As to claim 22, Page teaches a means for selecting store-and forward mode of message delivery ("store and forward" client request, col. 6, lines 6-14).

As to claims 1-5, 7, these are the method claims of claim 16-20, 22, and thus note the discussions of claims 16-20 and 22, respectively.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 6, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Page et al as applied to claims 1, 9 in view of Banda et al (U S pat. 5,396,630).

As to claim 21, Page does not teach means for selecting peer-to-peer mode of message delivery.

Banda teaches inter-object communications, including peer-to-peer mode of message delivery (direct communication between objects via path 264), alternative to brokered/indirect mode of message delivery (via paths 258-256-262). Col. 7, lines 4-25.

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Therefore, it would have been obvious to include a peer-to-peer mode of message delivery into Page. One of ordinary skill in the art would have been motivated to combine the teachings of Page and Band because this would have reduced the communication overhead desirable in a heterogeneous system such as Page's.

As to claim 6, it is a method claim of claim 21, and thus note the discussion of claim 21.

13. Claims 8, 9, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Page et al as applied to claims 1, 9 in view of Koo et al (U S Pat. 6,704,785).

As to claim 23, Page does not teach the communication services include broadcast mode of message delivery, nor publication-and-subscriber mode of message delivery.

Koo teaches communications services, including publication-and-subscriber mode of message delivery (publish-subscribe communication) and broadcast mode of message delivery (transfer data from a single publisher to a large number of subscribers). See col. 2, lines 9-11; col. 9, line 62-65; fig. 3.

Therefore, it would have been obvious to include publication-and-subscriber mode and broadcast mode of message delivery into Page. One of ordinary skill in the art would have been motivated to combine the teachings of Page and Koo because this would have reduced traffic below the level required by demand-based communication 9col. 2, lines 5-7).

As to claims 8, 9, these are the method claims of claim 23, 24, and thus note the discussions of claims 23 and 24, respectively.

14. Claims 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo et al (U S Pat. 6,704,785) in view of Slaughter et al (U S Pat. 6,643,650).

As to claim 14, Koo teaches in a network (fig. 6), said network comprising a plurality of services (information and event communications, publishers, subscribers) and wherein said plurality of services need to communicate (publish-subscribe communication) with others of said plurality of services, a method for allowing

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communications between said plurality of services, the steps of said method comprising:

creating one or more event channels (channel factories 41), said event channels enabling communications between said plurality of services (col. 6, lines 1-8);

subscribing services to said events channel to poll for events within said event channel (Connect_Subscriber(), fig. 4) [It is noted that the CORBA event service specification, discussed by Koo (col. 4) teaches the push mode and poll mode of communication.]; and

publishing said events from services to said event channel so that other services may poll said events (AddSource(), col. 12, line 63; publisher publishes data, col. 10, lines 4-5).

While Koo teaches notifying channel's existence (ConsumerNotifier(), col. 12, lines 50-52), Koo does not teach notifying all spaces that an event channel exists.

Slaughter teaches publish-subscribe communications for spaces and services (col. 7, line 62 – col. 8, line 24), including notifying all spaces of available services (service publishes an advertisement for itself in the space, col. 17, line 65 – col. 18, line 12).

Therefore, it would have been obvious to include into Koo spaces and notifying all spaces of an available service. One of ordinary skill in the art would have been motivated to combine the teachings of Koo and Slaughter because this would have provide an efficient mechanism for locating services based on locations of clients, and in particular, thin mobile clients, during communications (Slaughter, col. 7, lines 50-59). An event channel service is a typical communication service, and therefore, when the teachings are combined, it would have been obvious to include an event channel service into the available services notified/advertised.

As to claim 15, Koo teaches said event channels enable asynchronous modes of communications (asynchronous, col. 2, line 26).

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (571) 272-3764. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (571) 272 3756. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 26, 2005


SUE LAO
PRIMARY EXAMINER